What is claimed is:

1. An alignment tool for aligning an adaptive cruise control sensor subsystem, comprising:

an illumination source;

an illumination axis defined by said illumination source;

a plurality of gauge pins, each having a respective distal end, said distal ends arranged to define a plane, wherein said plane has a known orientation to said illumination axis; and

a body to which said illumination source and said plurality of gauge pins are attached.

2. The alignment tool of claim 1, wherein said illumination source comprises a laser.

3. The alignment tool of claim 1, wherein said illumination source comprises direction adjustment fittings.

4. The alignment tool of claim 1, wherein said illumination source comprises operation using a battery housed within said illumination source.

5. The alignment tool of claim 1, wherein said illumination source receives electrical power from at least one supply external to said illumination source.

6. The alignment tool of claim 1, wherein said illumination source comprises attachment to said body by a male screw thread integral to said illumination source.

7. The alignment tool of claim 6, wherein said male screw thread comprises a screw thread axis collinear with said illumination source axis.

8. The alignment tool of claim 1, wherein said illumination source comprises attachment to said body by at least one female screw thread integral to said illumination source.

9. The alignment tool of claim 1, wherein said alignment tool comprises a compressive sleeve attaching said illumination source to said body by surrounding said illumination source at least in part and applying clamping force to said illumination source.

10. The alignment tool of claim 1, wherein said gauge pins are comprised of one of tool steel, stainless steel, ceramic, ceramic-coated metal, aluminum alloy, spring metal alloy, unfilled engineered plastic, and filled engineered plastic.

11. The alignment tool of claim 1, wherein said gauge pins are comprised of a material the durability of which is not less than the durability of the material with which said gauge pins make contact when in use.

12. The alignment tool of claim 1, wherein said gauge pins screw into one of threaded holes in said body, threaded inserts in said body, and threaded nuts located beyond unthreaded apertures in said body.

13. The alignment tool of claim 1, wherein said gauge pins attach to said body by one of co-molding, vibroinsertion, differential temperature

interference fitting, and press fitting.

14. The alignment tool of claim 1, wherein said gauge pins are formed integrally with said body.

15. The alignment tool of claim 1, further comprising a plurality of retention hooks that hold the alignment tool to the adaptive cruise control sensor subsystem.

16. The alignment tool of claim 15, wherein each of said retention hooks comprises:

an oblong center section;

an offset end that can move parallel to a long axis of said oblong center section;

a gripping tip; and

a handle.

17. The alignment tool of claim 16, wherein each of said retention hooks further comprises:

a spring that applies force to draw said offset end toward said body;

a body bearing surface on said body against which said spring can bear; and

a hook bearing surface on said retention hook against which said spring can bear.

18. The alignment tool of claim 15, wherein each of said retention hooks comprises a locking cam to hold said retention hook in position.

19. The alignment tool of claim 15, wherein each of said retention hooks is able to rotate.

20. An alignment tool for an adaptive cruise control sensor subsystem having a center of emission, comprising:

means for illuminating a target;

means for establishing an illumination axis defined by said illumination means;

means for making simultaneous physical contact with a plurality of reference surfaces on the adaptive cruise control sensor subsystem;

means for establishing a specified angular relationship between a plane defined by said means for making contact and the illumination axis defined by said illuminating means, wherein said angular relationship occurs at the center of emission of the adaptive cruise control sensor subsystem being aligned; and

means for combining said means for illuminating and said means for making contact in a unitary assembly.

21. The alignment tool of claim 20, further comprising means for affixing said alignment tool to said sensor subsystem, wherein said means for affixing affords hands-free usage of said alignment tool.

22. The alignment tool of claim 20, further comprising means for affixing said alignment tool to said sensor subsystem, wherein said means for affixing uses spring-loaded clamping fittings.

23. The alignment tool of claim 20, further comprising means for adjusting said means for establishing orthogonality, wherein said means for adjusting uses integral adjusting screw fittings.

24. The alignment tool of claim 20, further comprising means for adjusting said means for establishing orthogonality, wherein said means for adjusting provides said adjusting through changes in the positions of said means for making contact.

25. A method for aligning an adaptive cruise control sensor subsystem on a vehicle, comprising the steps of:

providing an alignment tool;

defining a target at which an axis of radiation of the adaptive cruise control sensor subsystem should point;

establishing an illumination axis defined by a light beam on the alignment tool;

contacting a plurality of reference surfaces on the adaptive cruise control sensor subsystem at specified orientations with respect to the axis of radiation of the adaptive cruise control sensor subsystem;

establishing a specified angle between a plane defined by the plurality of reference surfaces on the adaptive cruise control sensor subsystem and a line defined by the axis of radiation of the adaptive cruise control sensor subsystem; and

adjusting the orientation of the plurality of coplanar reference surfaces on the adaptive cruise control sensor subsystem until the illumination axis of the light beam on the alignment tool coincides with the target.

26. The method of claim 25, further comprising affixing the alignment tool to the sensor subsystem, wherein the affixing affords hands-free usage of the alignment tool.

27. The method of claim 25, further comprising affixing the alignment tool

to the sensor subsystem, wherein the affixing uses spring-loaded clamping fittings.

28. The method of claim 25, further comprising adjusting the alignment of the illumination axis of the alignment tool, using adjusting screw fittings integral with the alignment tool.